

What is claimed is:

1 1. A method comprising:
2 determining, at a first server, to which one of N
3 mirrored servers a request from a client should be routed
4 based at least in part on an address indicating the client and
5 a route to the client and on the quality of service between at
6 least some of the N mirrored servers to the client; and
7 determining to route requests from other clients
8 associated with the address to the one of the N mirrored
9 servers.

1 2. The method of claim 1 further comprising using an
2 end to end connection speed between each of the at least some
3 of the N mirrored servers and the client to define the quality
4 of service between the at least some of the N mirrored servers
5 to the client.

1 3. The method of claim 1 in which a connection metric
2 value between each of the at least some of the N mirrored
3 servers and the client defines the quality of service between
4 each of the at least some of the N mirrored servers to the
5 client.

1 4. The method of claim 3 in which the connection metric
2 value includes a round-trip time value.

1 5. The method of claim 1 in which the address includes
2 an Internet Protocol address.

1 6. The method of claim 1 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 7. The method of claim 1 in which the part of the
2 address indicating a route to the client is not identifiable
3 by inspection of the address.

1 8. The method of claim 1 further comprising routing the
2 request to the one of the N mirrored servers providing the
3 fastest connection speed between the client and any of the at
4 least some of the N mirrored servers.

1 9. The method of claim 1 further comprising determining
2 if the one of the N mirrored servers can handle the load
3 routed to it, and if not, isolating a group of clients
4 associated with the address and routed to the mirrored server
5 by redirecting the group of clients associated with the
6 address and connected to the mirrored server to another one of
7 the N mirrored servers.

1 10. The method of claim 1 further comprising determining
2 if other clients associated with the address and routed to the
3 one of the N mirrored servers experience different connection

performance than the client, and if so, isolating the ones of the clients experiencing the different connection performance and directing the ones of the clients to another one of the N mirrored servers.

11. The method of claim 10 further comprising associating the address associated with the ones of the clients with the another one of the N mirrored servers and routing requests from clients associated with the address to the another one of the N mirrored servers.

12. An article comprising a machine-readable medium which stores machine-executable instructions, the instructions causing a machine to:

determine, at a first server, to which one of N mirrored servers a request from a client should be routed based at least in part on an address indicating the client and a route to the client and on the quality of service between at least some of the N mirrored servers to the client; and

determine to route requests from other clients associated with the address to the one of the N mirrored servers.

13. The article of claim 12 further causing a machine to use an end to end connection speed between each of the at least some of the N mirrored servers and the client to define

4 the quality of service between the at least some of the N
5 mirrored servers to the client.

1 14. The article of claim 12 in which a connection metric
2 value between each of the at least some of the N mirrored
3 servers and the client defines the quality of service between
4 each of the at least some of the N mirrored servers to the
5 client.

1 15. The article of claim 12 in which the connection
2 metric value includes a round-trip time value.

1 16. The article of claim 12 in which the address
2 includes an Internet Protocol address.

1 17. The article of claim 12 in which address includes an
2 Internet Protocol address on a network using classless inter-
3 domain routing.

1 18. The article of claim 12 in which the part of the
2 address indicating a route to the client is not identifiable
3 by inspection of the address.

1 19. The article of claim 12 further causing a machine to
2 route the request to the one of the N mirrored servers
3 providing the fastest connection speed between the client any
4 of the at least some of the N mirrored servers.

1 20. The article of claim 12 further causing a machine to
2 determine if the one of the N mirrored servers can handle the
3 load routed to it, and if not, to isolate a group of clients
4 associated with the address and routed to the mirrored server
5 by redirecting the group of clients associated with the
6 address identifier and connected to the mirrored server to
7 another one of the N mirrored servers.

1 21. The article of claim 12 further causing a machine to
2 determine if other clients associated with the address and
3 routed to the one of the N mirrored servers experience
4 different connection performance than the client, and if so,
5 to isolate the ones of the clients experiencing the different
6 connection performance and routing the ones of the clients to
7 another one of the N mirrored servers.

1 22. The article of claim 21 further causing a machine to
2 associate the address associated with the ones of the clients
3 with the another one of the N mirrored servers and to route
4 requests from clients associated with the address to the
5 another one of the N mirrored servers.

1 23. A method comprising:
2 determining if an address associated with a request sent
3 by a client attempting to connect to a first server over a
4 network exists in a table associated with the first server,

5 where parts of the address indicating the client and a route
6 to the client are unknown; and

7 if so, routing the request to one of N mirrored servers
8 that is associated with the address in the table as having the
9 fastest connection speed between the address and the one of
10 the N mirrored servers.

1 24. The method of claim 23 in which the address includes
2 an Internet Protocol address.

1 25. The method of claim 23 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 26. The method of claim 23 further comprising, if the
2 address does not exist in the table, performing a round robin
3 operation to route the request to one of the N mirrored
4 servers.

1 27. The method of claim 25 in which the round robin
2 operation includes mirrored servers that no client associated
3 with the address has been routed to.

1 28. The method of claim 25 further comprising, after
2 each of the N mirrored servers gets scheduled in a round robin
3 operation or otherwise has a known connection speed to the
4 address, adding the address to the table.

29. The method of claim 23 further comprising routing requests from other clients associated with the address to the same mirrored server as the client.

30. The method of claim 23 further comprising determining if other clients associated with the address and routed to the determined mirrored server experience different connection performance than the client, and if so, isolating the ones of the clients experiencing the different connection performance and directing the ones of the clients to another one of the N mirrored servers.

31. A system comprising:
N mirrored servers including a first server; and
a mechanism associated with the first server and configured to determine if an address indicating a client and a route to the client exists in a table associated with the first server, and

if so, to route a request from the client to a one of the N mirrored servers that is associated with the address in the table as providing desirable quality of service between the address and the one of the N mirrored servers.

32. The system of claim 31 in which the address includes an Internet Protocol address.

1 33. The system of claim 31 in which the address includes
2 an Internet Protocol address on a network using classless
3 inter-domain routing.

1 34. The system of claim 31 in which the mechanism is
2 also configured, if the address does not exist in the table,
3 to perform a round robin operation to route the request among
4 the N mirrored servers.

1 35. The system of claim 31 in which the mechanism is
2 also configured to associate the one of the N mirrored servers
3 that is proximally nearest to the client with the address in
4 the table.

1 36. The system of claim 31 in which the mechanism is
2 also configured to redirect the request to another one of the
3 N mirrored servers if the mirrored server it is routed to
4 cannot handle the load routed to it.

1 37. A method comprising:
2 performing a round robin procedure to determine to which
3 one of N mirrored servers client requests coming from clients
4 in a group of clients having the same address should be
5 routed;
6 after a client request has been scheduled for each server
7 in the N mirrored servers in the round robin procedure,

8 isolating addresses of clients in the group of clients having
9 similar performance and associating a server providing the
10 fastest connection speed with each isolated address; and

11 directing future requests from clients having one of the
12 isolated addresses to the server associated with the isolated
13 address as providing the fastest connection speed.

1 38. The method of claim 37 in which the address includes
2 topologically-significant information associated with the
3 client and topologically-insignificant information associated
4 with the client.

1 39. An article comprising a machine-readable medium
2 which stores machine-executable instructions, the instructions
3 causing a machine to:

4 group clients associated with the same address having a
5 topologically-significant segment and a topologically-
6 insignificant segment into clusters; and

7 route requests from clients in a cluster to the same one
8 server included in the group of N mirrored servers.

1 40. The article of claim 39 in which the requests are
2 routed to the one of the N mirrored servers based on quality
3 of service between at least some of the clients and at least
4 some of the N mirrored servers.

1 41. The article of claim 39 further causing a machine to
2 detect a performance difference between two or more
3 clients grouped in a cluster,
4 isolate the ones of the clients in the cluster
5 experiencing the performance difference, and
6 group the ones of the clients in another cluster.

1 42. The article of claim 39 in which the topologically-
2 significant segment of the address and the topologically-
3 insignificant segment of the address cannot be identified by
4 inspecting the address in binary form.

1 43. The article of claim 39 in which the topologically-
2 significant segment of the address includes information on a
3 route to a client and the topologically-insignificant segment
4 of the address includes information on the client.

1 44. The article of claim 39 further causing a computer
2 to determine if a server in the group of N mirrored servers
3 can handle the load routed to it, and if not, isolate a group
4 of clients connected to the server and direct the group of
5 clients to another server in the group of N mirrored servers.